MEDART

23J
Me

TELESCOPIC GYM SEATS

Medart has achieved, in Telescopic Gym Seats, three basic objectives: (1) the greatest possible seating capacity in the least space; (2) the ultimate in spectator safety; and (3) recovery of maximum floor area when seats are not in use.

The steel understructure, conforming to A.S.A. specifications, is completely self-supporting open or closed. It is strong enough to support up to 400 pounds per linear foot per row without noticeable deflection or side sway.

Each full length 16′ row rests on *four* double-angle welded vertical uprights and is rigidly sway-braced with steel channels. The live load bears directly on the uprights, which cause dual rubber rollers to retract into housings and place all the weight immovably on the floor. There is no load on walls or casters. Uprights are staggered for even distribution of weight over entire floor area.

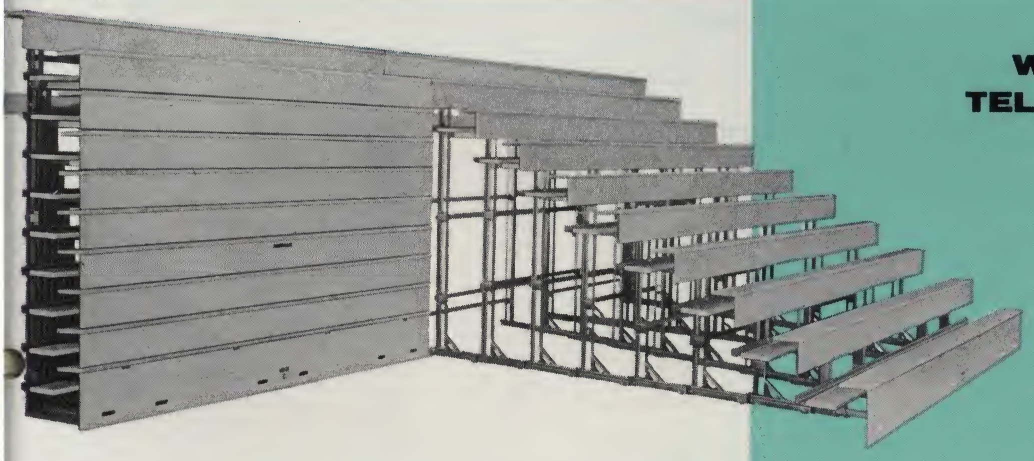
Medart Seats do not depend on diagonal bracing, hinged rods or other stress-bearing devices. Wood seat, foot and riser boards add additional rigidity to the self-supporting steel understructure. No other retracting type of seat exceeds the dependable safety of Medart Telescopic Gym Seats.

BASKETBALL BACKSTOPS

The superiority of Medart Basketball Backstops has long been established wherever basketball is played. Excellence of design, materials and workmanship is a Medart tradition: full conformance to the standards of the National Basketball Committee is an unvarying policy; and the many extra years of dependable service, free of costly upkeep and maintenance, other than a minimum of normal seasonal attention, has won for Medart unequalled preference among schools, colleges and architects everywhere.

Contributing largely to the enviable reputation of its basketball backstops is Medart's practice of providing experienced engineering counsel during planning and specification stages to assure a strong, rigid and vibration-free installation. Medart not only helps to choose the *right* backstop but, by an analysis of structural conditions, designs "Tailored-To-The-Job" backstops unexcelled in ruggedness and faultless service.

Medart—The Nation's Most Experienced Authority—has been recognized as the pioneer and major producer of basketball backstops since Dr. James Naismith developed and introduced the game in 1892. This vast reservoir of "know-how", unmatched in the industry, is available without obligation to help in solving every basketball backstop problem. To be sure it's right, consult Medart! (*See page* 6.)



WALL-ATTACHED TYPE TELESCOPIC GYM SEATS

No special construction is required for installation. Simply attached to the wall and anchored to the floor at the back, the entire weight rests on the floor. Furnished in standard 16′ full-length or 8′ half-length sections from 3 to 21 rows. For special conditions, seat sections can be furnished in 12′, 13′, 14′ or 15′ sections.

RECESSED & TWO-LEVEL TYPE

Recommended for new gymnasiums, these modern installations offer, at lower cost, the same facilities, convenience and safety as permanent built-in seats, yet release when not in use, maximum areas on main floor and balcony for other activities. Flush recessed seats are placed under a balcony when conditions make a suitable recess available. (See detail on Page 2.) Construction of Recessed Seats, up to 20 rows in height, is the same as wall-attached except for minor mechanical differences required for installation.

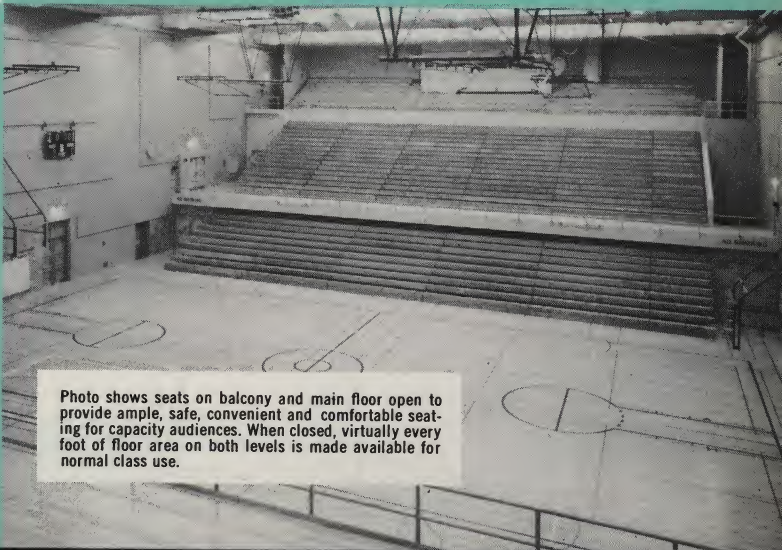
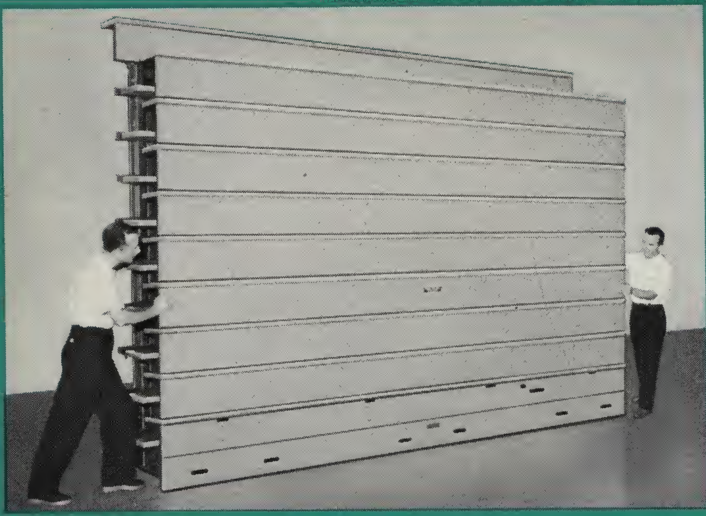


Photo shows seats on balcony and main floor open to provide ample, safe, convenient and comfortable seating for capacity audiences. When closed, virtually every foot of floor area on both levels is made available for normal class use.

FRED MEDART PRODUCTS, INC.
3562 DEKALB STREET, ST. LOUIS 18, MISSOURI • PHONE: PROSPECT 6-1880

Copyright 1959 by Fred Medart Products, Inc. • Saint Louis 18, Missouri, U. S. A.

MOVABLE TYPE GYM SEATS



Perfect solution to the seating problem when building conditions do not permit installation of wall-attached seats. Movable seats provide ample seating that can be compactly and easily stored. They are identical to wall-attached seats except for the addition of truck guides on understructure base if seats are to be moved on Lift Trucks, or adding the Hydraulic Lift mechanism which eliminates the use of separate trucks. (See details at right.) Movable Type seats are furnished in full or half length sections of 3 to 12 rows.

HYDRAULIC LIFT is built integral with steel understructure of each section. A few strokes of the pump handle raises seats; release of valve lowers them quickly, quietly. The rugged construction is typified by 4" channels, cold rolled steel shafts, dual 5" ball-bearing swiveling wheels turning on double ball-bearing races, etc. Caster capacity, per pair, 1000 lbs. 3000 lb. hydraulic pump. There are no hydraulic lines to leak oil.

LIFT TRUCKS roll into guides beneath understructure, and are raised, for rolling seats into position, by a crank inserted through holes in front riser. Trucks have large dual rubber-tired casters that swivel on ball bearings. Two trucks are furnished for **each installation.**

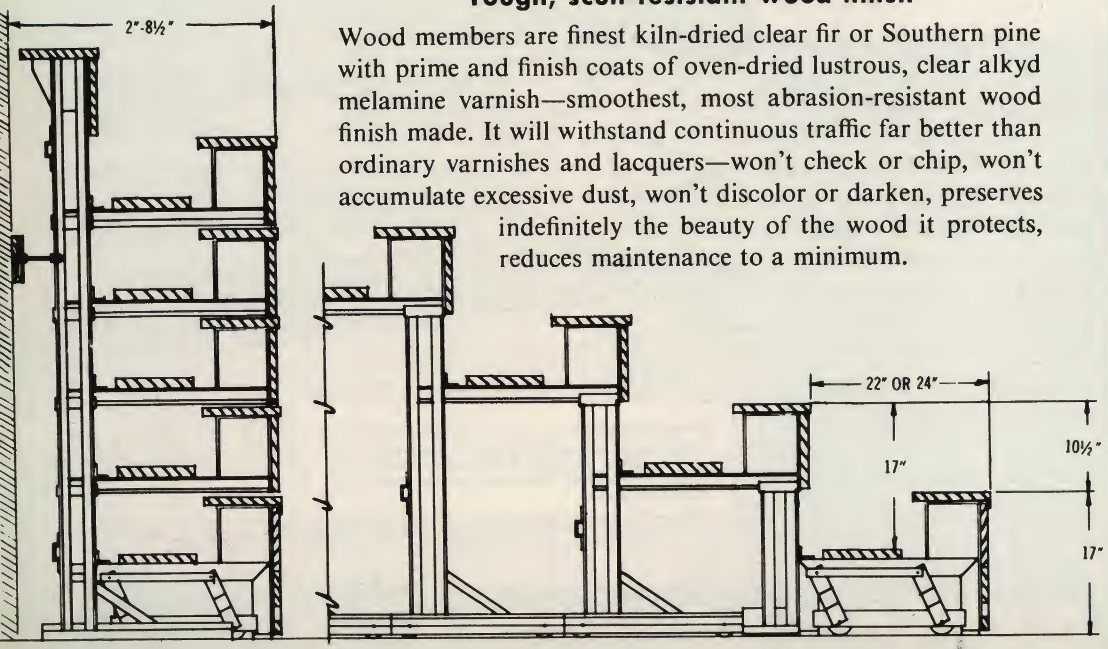
TYPICAL CONSTRUCTION DETAIL

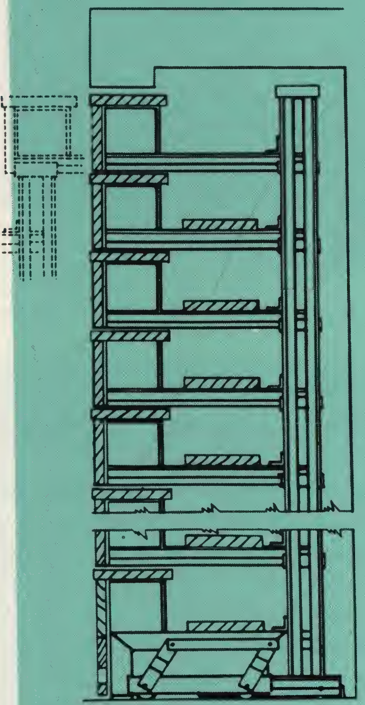
Medart Seats are built with 22" or 24" row depth and with 10½" or 11½" row rise. Leg height is 17" for 10½" row rise and 18" for 11½" row rise. Special seat rise is available when "line of sight" conditions are extreme. An automatic front row lock engages 8 rubber brake shoes on 1st and 2nd rows to prevent shifting when seats are open.

Seat boards are 1-1/16" x 9½"; foot boards are 1-5/16" x 9½"; risers are 25/32" x 9". Front riser has hand grips for easy opening and closing of seat section. Top riser is furnished hinged or non-hinged.

Tough, scuff-resistant wood finish

Wood members are finest kiln-dried clear fir or Southern pine with prime and finish coats of oven-dried lustrous, clear alkyd melamine varnish—smoothest, most abrasion-resistant wood finish made. It will withstand continuous traffic far better than ordinary varnishes and lacquers—won't check or chip, won't accumulate excessive dust, won't discolor or darken, preserves indefinitely the beauty of the wood it protects, reduces maintenance to a minimum.





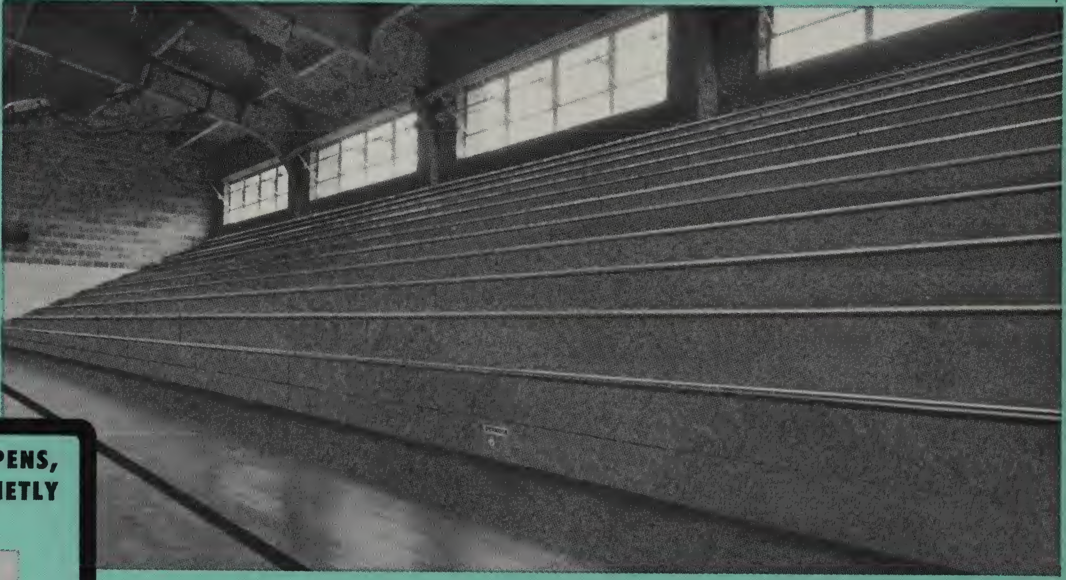
TYPICAL DETAIL OF RECESSED SEATS IN CLOSED POSITION

Minimum depth of recess for 22" seats to 11 rows should be 2'8½"; for 24" seats, 2'10½". Minimum recess height for 10 rows or less is height of top seat plus 1". An additional 2' of recess depth is required for seats 12 to 20 rows high. Seats with 11½" row rise require comparable increase in recess height.

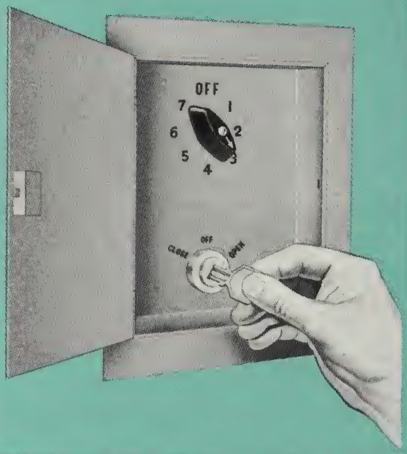
MEDART AUTOMATIC POWER-OPERATED GYM SEATS

TWO TYPES: **UNIT MOVER for independent operation of individual seat sections**
BANK MOVER for simultaneous operation of multiple seat sections

- Medart's power operation eliminates all effort necessary for manual opening and closing of seats
- No special construction provisions required
- Key-operated control may be installed anywhere



KEY-OPERATED CONTROL OPENS, CLOSES SEATS QUICKLY, QUIETLY



Moves the biggest seat installations into position in minutes. If full capacity of seats is not required, release of key stops movement instantly when desired number of rows are in position. Automatic safety controls insure hazard-free operation. Limit switches in control circuit prevent over-travel in either direction. Switches for any number of Unit Movers or Bank Movers are incorporated into a single key-operated control which can be remotely installed anywhere in gym for greatest convenience. Removable key prevents unauthorized operation.

MEDART'S FULL AUTOMATIC POWER OPERATION* opens and closes the largest gym seat installations quickly, quietly and safely without physical effort. A smooth, controlled speed of 10 feet-per-minute eliminates all slamming and banging—life of seats is prolonged—maintenance is reduced to a minimum.

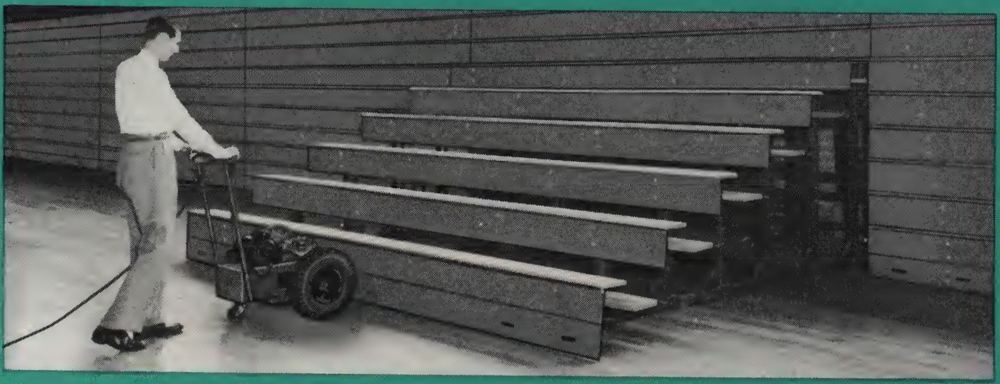
- Medart's Bank Mover opens and closes at one time, all aligned seat sections of a maximum length of 112 feet and up to 15 rows high, or a maximum length of 80 feet and up to 21 rows high.
- Medart's Unit Mover opens and closes individual seat sections one at a time as desired, regardless of length or height.
- No floor tracks or building changes are necessary. The installation of power operation requires no other conditions than are needed for manually-operated seats.
- No complicated wiring is needed. Any ordinary 110-volt power source will do.
- Seats roll open or closed without binding or "crabbing". Straight-line trackage is an outstanding feature of Medart power-operated seats. All caster bearings are made of a Nylon material which needs no lubrication, thus eliminating any possible oil-staining of gym floor.
- Seats automatically lock in any position during opening or closing by release of control key. Whether one, a few, or all rows are required, seats remain safely stationary until power control is key-actuated.

Power Operation For Medart Seats Already In Service—Automation can be applied to existing Medart Seat installations. No extensive changes are necessary in gym seat construction. Cost is surprisingly low. Ask for complete details.

*Patents Pending

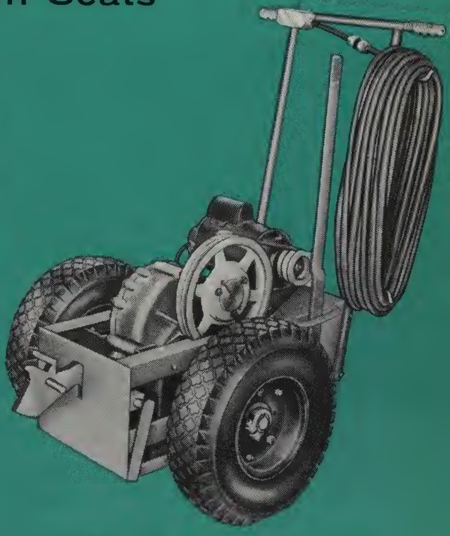
MEDART MOTO-VATOR†

Mobile Power Operator For Medart Gym Seats



Opening and closing the largest telescoping gym seat sections with the Medart Moto-Vator is easy and simple.

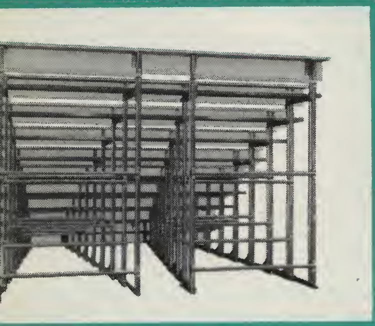
A lock-lift arm at the front of this rugged, compact electric power unit is directed into an opening in the center of the front seat riser. A handle-lever instantly releases the braking mechanism of the seat section. A switch is moved to "open" and in a few seconds the section is fully opened. To close, the simple procedure is reversed. Easy steering of the Medart Moto-Vator guarantees accurate straight-line trackage. Extra large pneumatic tires insure against damage to floors.



Medart Moto-Vator is also available for Medart Seats installed since 1954.

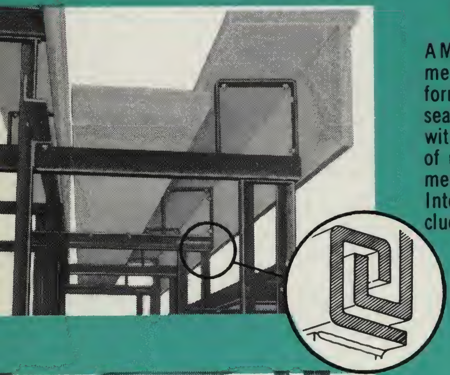
†T. M. Reg.

FEATURES OF DESIGN AND CONSTRUCTION



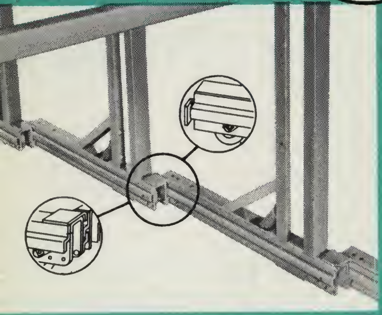
SELF-SUPPORTING STEEL UNDERSTRUCTURE

Rear view photo showing seats in extended or open position. Note how each row is supported on 4 vertical uprights and how they evenly distribute the load over entire floor area. Impartial laboratory tests show complete safety under loads of 400 pounds per linear foot of row without appreciable deflection, and practically no side sway at peak of stress.



FLOATING MOTION

A Medart exclusive feature—an arrangement of smooth-working precision-formed parts that make it possible for seat sections to be opened and closed without effort. A 5″ long sleeve at top of upright interlocks with a horizontal member along which the sleeves move. Interlocking of these members precludes jamming and binding during opening and closing. No row can be disengaged from another.

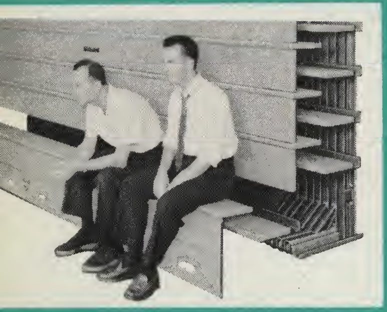


DUAL ALIGN

Another Medart exclusive! "Dual Align" provides direct line opening and closing of each gym seat section. Roller housings are keyed together and have lateral aligning interlocking guides. Each of the four uprights per row with the "Floating Motion" arrangement at the top and the "Dual Align" housing at the bottom assure straight-line, quiet and efficient operation.

SEATING COMFORT

Most spacious of all gym seats. Full 17″ from seatboard to footboard, considered most comfortable height by seating authorities. Plenty of room from front to back in either 22″ or 24″ row depth (front to front of seatboards). Open toe space under seatboards and heel space under risers add many extra inches of foot room.

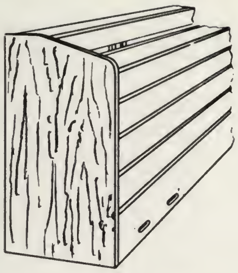


USE OF INDIVIDUAL ROWS

Medart Seats can be partially opened to permit use of one, two, or as many rows of seats as may be desired for any specific event. Eliminates need to carry, set up, fold and return to storage, folding chairs normally required for such events. With one row open, each seat becomes a comfortable bench around the gym, or for the length of the balcony or stage.

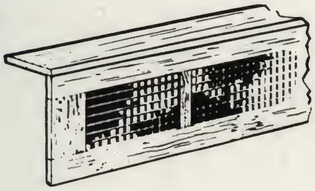
Printed in U.S.A.

ACCESSORIES FOR MEDART SEATS



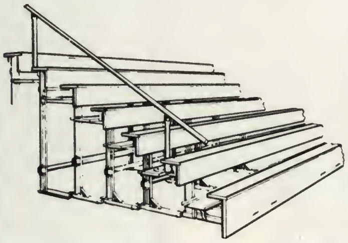
END CLOSURE PANELS

Used for enclosing exposed ends of Wall-Attached seats when closed. Fastened permanently in place. Not removable. Thick plywood finished with clear lacquer.



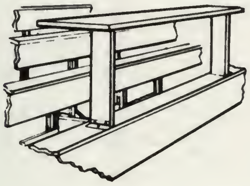
VENTILATING GRILLS

Installed in front or hinged top risers for heat or air circulation when seat sections are installed in front of radiators or ventilation ducts. Olive green finish.



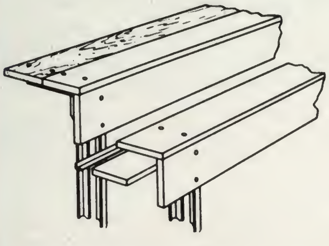
END RAILS

Furnished for movable or wall-attached seats of 7 rows or more. 1-11/16″ O.D. steel pipe; olive green baked enamel. Hinged uprights clamp into metal sockets bolted to seats. Stored on footboards when seats are closed. Back rails also furnished for movable seats.



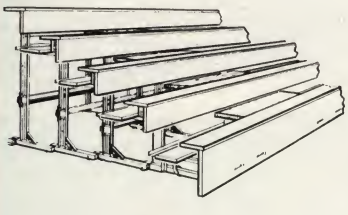
SCORER TABLES

Available in standard 6′ and 8′ lengths. Top quality seasoned lumber. Non-scuff composition reinforced top, 22″ wide, 3/4″ thick. Mounted on seatboard with bolts and wing nuts. Legs fold under table for storing. Clear lacquer finish.



FILLER BOARDS

Should be installed at top row level when structural conditions keep top seat more than 6″ from wall. Solid wood 1-1/16″ thick, mounted on steel supports fastened beneath top seatboard.



AISLE TREADS

Make it easier to reach upper rows of seats . . . may be required by law or preferred by buyer. Tread is 3′ long (can be furnished in special length if desired). Mounted on steel brackets bolted to footboards. Flush with seatboard in front of footboard on which they are mounted. Won't interfere with opening or closing. Furnished at extra cost.

SPECIFICATIONS FOR MEDART TELESCOPIC GYM SEATS

GENERAL SCOPE—As shown by plans and covered by these specifications, contractor shall furnish and install the following length units of Medart Telescopic Gym Seats, as manufactured by Fred Medart Products, Inc., St. Louis, Missouri, or approved equal in the opinion of the architect.

......ft. long units......rows high, wall type.

NOTE: Although standard length sections are specified in foot increments, actual length is 1″ less than nominal dimension, i.e., 16′0″ section is 15′ 11″ long.

Material and workmanship to be of best grade. Fabrication and finish shall be in accordance with the highest standards for this type of work. Equipment shall be installed by factory trained personnel. Contractor shall furnish all hardware required for proper installation. Equipment shall be guaranteed against defects in material or workmanship for a period of one year from date of installation.

OPERATION GENERAL—Gym Seats shall operate on the telescoping principle. The front of the seats shall be in vertical registration when closed. Operation shall permit one or more rows of seats to be opened for use, while remaining rows are left in "nested" position.

MANUAL OPERATION—Gym Seats shall be of type to be opened or closed manually.

AUTOMATIC POWER OPERATION—Gym Seat sections shall be equipped with integral, electrically-powered operators, controlled from one or more panels. Opening or closing action to be achieved by turning the selector switch for a specific power operator and then actuating the key switch to the open or close position.

MEDART MOTO-VATOR OPERATION—Portable power-operated mover for use with Medart telescopic gym seats to open or close any size section up to and including 16 ft. long and 21 rows high.

DESIGN—1. Gym Seats shall be designed to support, in addition to their own weight, a vertical "live" load of 120 lb. per lineal foot of seatboard and footboard and horizontal "swaying" force of 24 lb. per lineal foot of seatboard. Consider steel parts only in calculating load stresses.

2. Maximum height, open or closed, shall not exceed............. When closed, seat sections of 3 to 12 rows inclusive shall not extend from wall in excess of 2′8½″; not more than 4′8½″ for sections 13 to 21 rows inclusive. When in open position, seats shall not extend from wall in excess of......... *Increase above depths 8″ if sections are power-operated or placed further than 1″ from wall for top seat comfort.*

3. Each row shall have depth of not less than 22″ from front to front of seatboard, a full 17″ of height from footboard to seatboard, and a row rise of 10½″ from seat to seat. Provide horizontal toe room of at least 6″ under the next lower seatboard.

NOTE: ABOVE DIMENSIONS MUST BE CHANGED FOR 24″ ROW DEPTH, AND/OR 11½″ ROW RISE.

CONSTRUCTION—Each standard length unit shall not exceed 16′0″—and shall consist of the following:

UNDERSTRUCTURE—The understructure shall be a rigid frame fabricated entirely of steel to conform to A.S.A. Specifications. All uprights, except the front uprights, shall each be constructed of two rolled steel angles with electrically welded boxtype cross members. Rear uprights shall be self-sustaining so that walls are not required to support any vertical load. Feet of rear uprights shall be fastened to floor at four points.

Each row of each full-length section to be supported by four uprights; each row of each half-length section (8′0″ or less), by two uprights. Uprights are to be transported in and out of the "nested" position by a multiple of bronze-bushed rubber wheels (2 per upright) completely covered by steel housing. The "live" load shall automatically compress the coil spring actuating each upright, permitting a flat shoe to bear firmly on the floor. When seats are extended, each upright must be interlocked (1) at the top, to the foot and seatboard support and (2) at the bottom, to the wheel housing of each succeeding upright. *Scissors-action linkage between succeeding rows will not be accepted.*

First row of seats shall have formed steel uprights interlocked with succeeding uprights and shall be equipped with toggle mechanisms automatically operated by raising and lowering of hinged front riser. Lowering of front riser shall automatically bring 8 corrugated rubber shoes into firm contact with floor, preventing shifting.

All welding shall be performed by certified welders and manufacturer shall present such certification upon request. Bolts for field assembly of steel understructure shall have lock washers.

RISERS, FOOT AND SEATBOARDS—All wood parts shall be of seasoned, quality lumber, carefully sanded, finished with rounded corners and bolted securely to steel members. Finished sizes shall be as follows:

Seatboards.....................	1-1/16″ x 9″ to 9½″
Footboards.....................	1-5/16″ x 9″ to 9½″
Risers..........................	25/32″ x 8½″ to 9″

Slat type boards will not be accepted.

Front hinged riser is to be equipped with a springbolt, key-operated lock, permitting locking of seats when closed. Riser to be wide enough to extend from seatboard to floor, and have sufficient pairs of hand holes to facilitate opening and closing of seat section. Optional: Top riser may be hinged if desired. Automatic top riser available at additional cost. Risers must be vertical type. All foot boards, seatboards and risers must be full-length.

END PANELS—End panels shall be furnished for wall type seats only at each open end exposed to view. End panels shall be of wood, shaped to outline of end of section when closed, and firmly fastened.

END RAILS—End rails of not less than 1-11/16 O.D. steel pipe are to be provided at all extreme ends of seat sections (not placed next to an end wall) which are 7 rows or higher. Construction to permit removal of end rails for storage within the gym seats when in the "nested" position.

AISLE TREADS (OPTIONAL)—Provide aisle treads (maximum 3′0″ width) in gym seat sections as shown on the plans. All aisle treads shall be mounted on metal brackets and bolted to and become an integral part of footboards. Aisle treads to be of such design that they can be installed or removed without remodeling of seating.

FINISH—Steel parts shall be finished with olive-green baked-on enamel. Wood parts shall be factory-finished with mechanically applied prime and finish coats of Medart's alkyd melamine varnish, each warm air-dried in special ovens.

MOVABLE GYM SEATS—(Furnished in sections of 3 to 12 rows inclusive.) Gym Seat section or sections specified above as "movable type" are to be similar to seating heretofore described. Specify whether movable seats are to be furnished with Hydraulic Lift Mechanism or Lift Trucks. (See page 2.)

RECESSED GYM SEATS—Gym Seat section or sections specified above as "recessed type" are to be identical to seating heretofore described, except rear uprights be provided with interlocking guide means at each upright permanently fastened within the recess to limit withdrawal of the section from the recess. *Link or folding attachments are not acceptable.* Recess depth shall not be less than 2′8½″ for sections of 11 rows high or less; not less than 4′8½″ for sections of 12 rows or higher. Interior recess height shall be 6″ greater than height of top seat. Top seatboard shall have 1″ clearance.

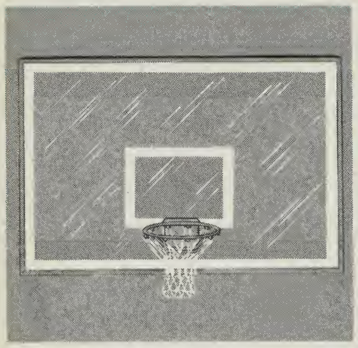
TABLE OF DIMENSIONS 22″ or 24″ ROW DEPTH

NUMBER OF ROWS	FLOOR SPACE				OPEN OR CLOSED HEIGHT
	22″ ROW DEPTH		24″ ROW DEPTH		
	Extended	Closed	Extended	Closed	
3	4′ 6½″	2′ 8½″	4′10¼″	2′10½″	3′ 2″
4	6′ 4½″	2′ 8½″	6′10½″	2′10½″	4′ 0½″
5	8′ 2½″	2′ 8½″	8′10½″	2′10½″	4′11″
6	10′ 0½″	2′ 8½″	10′10½″	2′10½″	5′ 9½″
7	11′10½″	2′ 8½″	12′10½″	2′10½″	6′ 8″
8	13′ 8½″	2′ 8½″	14′10½″	2′10½″	7′ 6½″
9	15′ 6½″	2′ 8½″	16′10½″	2′10½″	8′ 5″
10	17′ 4½″	2′ 8½″	18′10½″	2′10½″	9′ 3½″
11	19′ 2½″	2′ 8½″	20′10½″	2′10½″	10′ 2″
12	21′ 0½″	2′ 8½″	22′10½″	2′10½″	11′ 0½″
13	23′ 0½″	4′ 8½″	25′ 0½″	5′ 0½″	11′11″
14	24′10½″	4′ 8½″	27′ 0½″	5′ 0½″	12′ 9½″
15	26′ 8½″	4′ 8½″	29′ 0½″	5′ 0½″	13′ 8″
16	28′ 6½″	4′ 8½″	31′ 0½″	5′ 0½″	14′ 6½″
17	30′ 4½″	4′ 8½″	33′ 0½″	5′ 0½″	15′ 5″
18	32′ 2½″	4′ 8½″	35′ 0½″	5′ 0½″	16′ 3½″
19	34′ 0½″	4′ 8½″	37′ 0½″	5′ 0½″	17′ 2″
20	35′10½″	4′ 8½″	39′ 0½″	5′ 0½″	18′ 0½″
21	37′ 8½″	4′ 8½″	41′ 0½″	5′ 0½″	18′11″

MEDART BASKETBALL BACKSTOPS

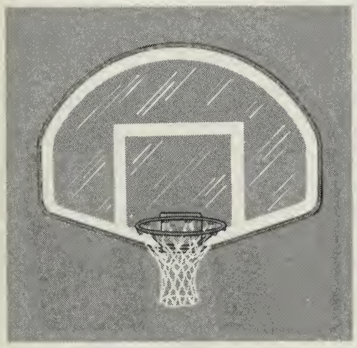
BACKBOARDS

GLASS



No. 1102 Rectangular Glass. Best of its type. Banking surface ½″ tempered glass (Herculite). Specially formed dual-angle metal frame riveted into a single unit after assembly. A precision, fast bank, important in rebounds. Glass set in Neoprene cushion. Target and border fired white vitreous enamel on reverse side.

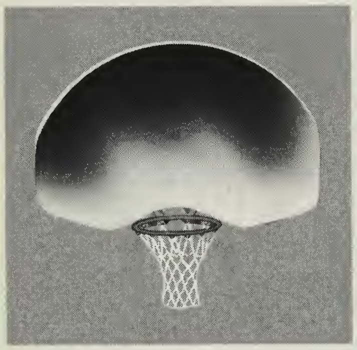
HERCULITE is the registered Trade Mark of The Pittsburgh Plate Glass Co.



No. 1104 Fan-Shaped Glass. Newest, finest made. Banking surface ⅜″ tempered glass (Herculite). Specially formed dual-angle metal frame riveted into single unit after assembly. Excellent rebound characteristics. Glass cushioned in Neoprene. White vitreous enamel border and target on reverse side.

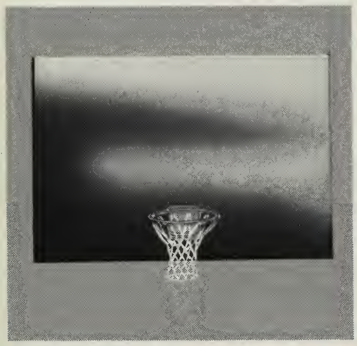
Height adjustment feature available for all backboards. *Write for complete information.*

STEEL



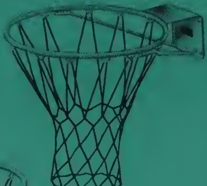
No. 1100 Fan-Shaped. 1-piece die-formed shell of 12-gauge steel. Perfectly rounded edges. Deep heavy-gauge steel, welded reinforcement on back assures level face and good banking surface. Has mounting for Official goals. Eggshell white finish.

WOOD

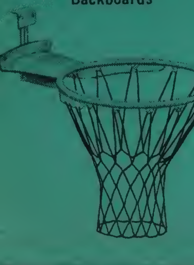


No. 169 Rectangular Face ¾″ thick, 5-ply, mounted on sturdy wood framework. A precision-made "true" backboard. Edges of smooth, rounded moulding. Won't crack, won't warp. Finish, 2 coats white enamel.

GOALS



No. 269-C Goal for Nos. 1102, 1104 and 169 Backboards



No. 1150-A Goal for Nos. 1100 Steel Backboard

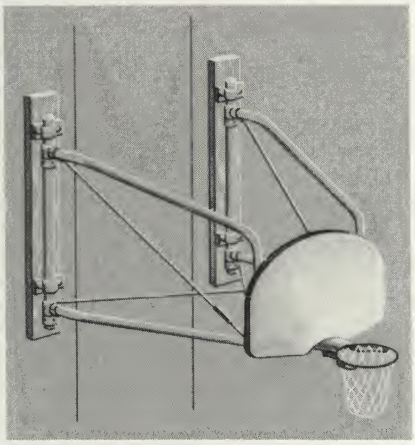
No. 269-C for Nos. 1102, 1104 and 169 with use of auxiliary mounting plate furnished. Conforms to mounting standards of NBC. Orange enamel finish. Slip-on net attachment; white cord nets. **No. 1150-A** for use with No. 1100.

A basketball backstop is a backboard complete with all suspension or framework necessary to support the backboard in its proper location. Location of backstops depends upon length and width of basketball court best adapted to size of gymnasium.

As building conditions vary, backstops must be built to fit individual requirements. Windows, wall radiators, ventilation ducts or partitions unable to withstand strain must be considered when deciding type of backstop to be used. Suspended ceilings, not provided with proper fittings during building construction period, also affect decision.

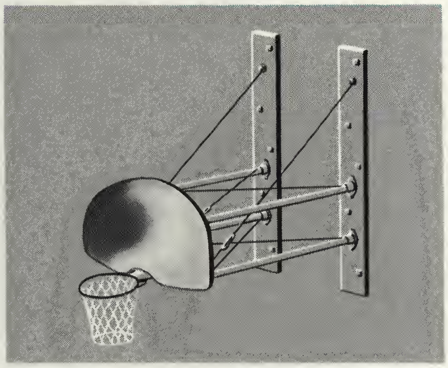
Medart can design and manufacture basketball backstops to suit every conceivable type of unusual structural condition. Backstop at left is typical of those designed by Medart, "tailored" to job conditions. Special equipment can be avoided if proper attention is given when building plans are prepared (i.e., standard backstops could be economically employed by locating courts or folding partitions slightly off center).

Very unusual structural conditions cause greater specializedtreatment. "Wings" and truss-type reinforcement for drop and brace pipes may be required or special reinforcement incorporated into wall construction. Although not recommended, Medart has even designed special suspended type backstops for extreme truss heights. (Such cases occasionally require installation of extra "deep" cradle.) Instead of specially reinforced drops and braces, expensive special suspended type can often be avoided by using portable floor type backstops.



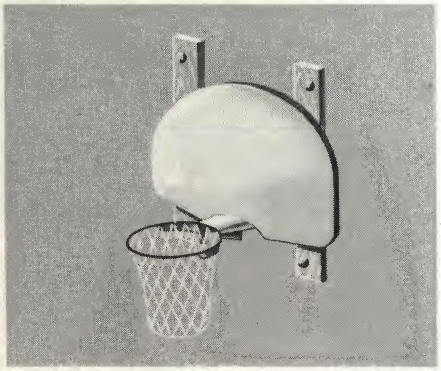
TYPICAL SPECIAL MOUNTING

STANDARD MOUNTINGS



No. 55 Extended Wall Braced—Can be braced from the wall up to 8′ 0″. Includes backboard, 4 heavy pipe extensions with malleable fittings, 2 sets of cross guys, 1 pair of oblique hanger braces, wall stringers. Guy and brace rods ⅜″ diameter with screw turnbuckles for tension adjustment. Specify extension dimensions.

No. 110 Wall Attached—Not official, but satisfactory for practice. Occasionally used in elementary school gyms where length of floor is less than 60′0″. May be installed in play rooms with rim of goal less than official height, making shots at basket less difficult for small children. Complete with wood stringers.



PORTABLE FLOOR AND STAGE BACKSTOPS

Medart Portable Backstops are available where suspended types cannot be economically installed in buildings with excessive ceiling heights. They are designed for ease of handling, movability, safety and durability. Write for catalog or consult with Medart about any special problem.

CONSTRUCTION FEATURES

The engineering and careful construction of all Medart Backstops assure strength, rigidity and durability. Compare the following with ordinary equipment:

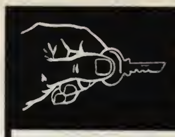
Fittings. Heavy-Duty malleable iron, sturdy without being cumbersome, for rigid connections. Undesirable strap steel not used.

Adjustable Guys. Steel rods ⅜" diameter. Screw-type Turnbuckle permits adjustment and absolute tension. No undesirable strap iron bracing.

Pipe. Overhead pipe is 3" I.D., the accepted, safe standard for all suspended gym apparatus. Drop pipes 2" I.D., braces 1½" I.D. Extension pipe for wall-type backstops variable in size but always provided of sufficient diameter to assure rigidity.

Winch. Exclusive with Medart! Worm-geared, crank-operated, "safety" winch. Automatically holds backstop when raised or lowered. Fully enclosed drum and gears; no chance of injury. Removable crank lessens unauthorized use. (Electric winch operator also available).

SUSPENSION (Truss member illustration below) Minimizes vibration from long span pipe deflection. Sufficient overhead and cross members provided to properly reinforce backstop supports. Suitable "cradles" supplied when conditions demand. Sturdy malleable fittings, with wide grip for rigidity and operation ease.



MEDART POWER-OPERATED REMOTE-CONTROL BASKET BALL BACKSTOPS

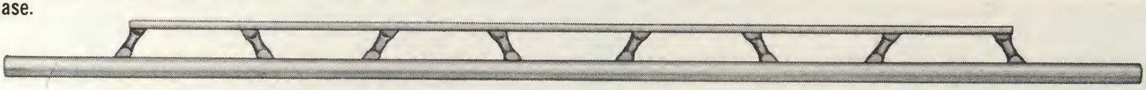
A Key Does All The Work.....

NOW... any Medart forward swing-up or backward swing-up backstop can be furnished with power operation! So simple, so easy, so safe, that any authorized person—boy, girl or grownup—can raise or lower the heaviest backstop without danger to himself, players, spectators or equipment.

A key-operated switch, for remote control of power-operator, can be placed at any convenient location in the gym. Key can be safeguarded to prevent unauthorized operation. Power operator can be installed on wall or overhead rigging depending upon conditions. Ruggedly built, compact and quiet, it requires no maintenance other than semi-annual operation.

Power operator can be installed on most Medart suspended backstops already in service.

ASK YOUR MEDART DISTRIBUTOR FOR DETAILS
or write direct



Truss Member

TYPICAL SPECIFICATIONS FOR SUSPENDED BACKSTOPS

SUSPENDED TYPE BACKSTOP

OVERHEAD SUPPORT—Backstops shall be suspended from 3" I.D. pipe, fastened to overhead roof frame members by malleable iron beam clamps. When overhead pipes are fastened on centers greater than 16' they shall be reinforced with welded truss pipe (not necessary for overhead sheave pipe).

DROP PIPES—Backboard supporting drops to be 2" I.D. pipe. Fittings for fastening to overhead pipes shall be clamp type, with wide surface bearing. Drop pipes to be rigidly braced with 2" I.D. intermediate spacer pipes as required. All drop pipes to be guyed with ⅜" steel cross rods, equipped with screw type turnbuckles.

(NOTE: *Brace and drop frames of No. 270 type suspended, forward swing up backstop shall be of welded construction, with cross rods described above on drop frame.*)

BRACING (Select type desired)

No. 276 FORWARD SWING-UP TYPE—Bracing shall be forward of drop pipes, to consist of 1-1/4" I.D. pipe, hinged at the middle.

No. 261 FORWARD SWING-UP TYPE—Bracing shall be 1½" I.D. pipe. Upper ends to have malleable "broad contact" hinge fittings. Lower ends to permit elongation when hoisting, and equipped with locking mechanism.

No. 270 FORWARD SWING-UP TYPE—Bracing shall be 1½" I.D. pipe. Upper ends to have malleable "broad contact" hinge fittings. Lower ends to have slide-bar attachment to drop pipes, and with "micro-adjustment" nuts for simultaneous "seating".

No. 272 FORWARD SWING-UP TYPE—Braces to be 1½" I.D. pipe fastened near lower end of drop pipes with malleable iron fittings. Opposite ends to be wall fastened with toggle type fittings (bolted to wall stringers). For stage attachment braces shall be secured by hand screws fitted into flush type floor plates.

No. 271 BACKWARD SWING-UP TYPE—Bracing shall consist of 1" square steel bars hinged in middle, fastened at upper end to overhead support and at lower end near bottom of drop pipes. Connections to be malleable iron.

No. 424 FIXED SELF BRACED TYPE—Bracing to be 1½" I.D. pipe. Upper ends to fasten to overhead pipe. Opposite ends to fasten near lower ends of drop pipes. Connections to be malleable iron.

No. 420 FIXED WALL BRACED TYPE—Bracing to be 1½" I.D. pipe fastened near lower ends of drop pipes. Opposite ends shall be fastened to wall with fittings bolted to stringers.

No. 822 WALL BRACED GATE TYPE—Bracing to be four 1½" I.D. and four 1¼" I.D. pipes. Backboard to be connected to two 2" I.D. pipes, each hinged at one end and with opposite ends having detachable fittings. Braces to extend backboard______ft.______in. (specify distance).

All bracing to be guyed with ⅜" steel cross rods equipped with screw type turnbuckles. When required, braces shall also be equipped with spacer pipes.

WALL SUPPORTED BACKSTOPS

No. 55 WALL RIGID TYPE—Four 1¼" I.D. pipe supports shall extend backboard______ft.______in. (specify distance). Provide two sets of horizontal cross guys and one set of oblique hanger rods of ⅜" diameter with screw turnbuckles.

No. 421 WALL RIGID TYPE—Two 2" I.D. pipe supports shall extend backboard______ft.______in. (specify distance). Two 1½" I.D. brace pipes of suitable length. Provide horizontal cross guys of ⅜" diameter steel rods with screw turnbuckles.

No. 821 WALL RIGID TYPE—Four 1½" I.D. pipe supports to extend backboard ______ft.______in. (specify distance). Provide two sets of horizontal cross guys and one set of oblique hanger rods of ⅜" diameter with screw turnbuckles.

No. 472 WALL SWING-UP TYPE—Same as No. 421, except indicate hinge type fittings and include sheave, winch and hoist cable specifications.

No. 404 WALL SWING-UP TYPE—Four 1¼" I.D. pipe supports to extend ______ft.______in. (specify distance). Furnish two sets of horizontal cross guys of ⅜" diameter steel rod equipped with screw turnbuckles. Two ¼" diameter steel stay cables at approximately 45° to fasten at backboard top and to wall stringer. Stay cables to have screw turnbuckle adjustment. To have wall mounted winch and hoist cable for raising and lowering.

No. 405 SIDE SWING WALL TYPE—Four 1¼" I.D. pipe supports to extend backboard______ft.______in. (specify distance). Furnish horizontal cross guys of cable equipped with instantaneous turnbuckles. Two ¼" diameter steel stay cables at 45° fastened to top of board and wall stringer. With screw turnbuckles provide two pull ropes, necessary sheaves and rope cleats for moving to open or closed position.

No. 820 WALL GATE TYPE—Attach to wall by stringer. Four 2" I.D. pipe supports to extend backboard______ft.______in. (specify distance). Supports shall be mounted on two vertical 2" I.D. pipes with hinged malleable fittings. Provide one set of horizontal cross guys with instantaneous turnbuckle with screw adjustment and one set of oblique hanger rods of ½" diameter steel with screw type turnbuckles. Include hand screw locking arrangement to permit backboard to be disconnected for swinging backboard and pipe supports to wall.

FIELD HOUSE BACKSTOPS

No. 455 FIELD HOUSE BACKSTOP—Shall permit lowering backboard and extensions between uprights. Base to be two castings joined by three 2" I.D. cross pipes. Uprights shall be 3" I.D. pipe. Braces to be 2½" I.D. pipe. Base to have four concealed steel casters operated by foot lever. Backboard to be 7'0" from uprights. Four extensions shall be 1½" I.D. pipe and guyed with ½" steel rods and screw turnbuckles. Hand operated geared winch included for raising and lowering backboard.

No. 533 FIELD HOUSE BACKSTOP—Shall permit lowering backboard and extensions between uprights. Base to be two castings joined by three 2" I.D. cross pipes. Uprights shall be 3" I.D. pipe; braces to be 2½" I.D. pipe. Base to have four concealed steel casters, operated by foot lever. Backboard to be 10' from uprights. Four extensions to be 2" I.D. pipe. Vertical strut and spacer pipes of 2" I.D. size. ¼" diameter 6 x 9 wire cable fastened to roof structure shall provide additional support for backboard in raised position. To have wall mounted winch and hoist cable for raising and lowering of backboard.

No. 634 FIELD HOUSE BACKSTOP—Same as No. 455 type, except to be rigid and without winch. Concrete counter weights to be supplied by owner.

No. 555 FIELD HOUSE BACKSTOP—Shall be of 6 inch pipe of L shaped design. Shall mount in a floor flange embedded in concrete slab (reinforced concrete slab by owner). Bolted flange connections to be below floor level to permit removal as desired. (Cover plate for floor opening by owner.) Sufficient extension to place backboard 10' from upright.

BACKBOARDS AND GOALS

STEEL FAN-SHAPED BACKBOARD & COMPANION GOAL—Official 35" by 54"; drawn from 12 ga. steel with 1½" flanges. Finish white enamel. Goal of welded steel ring with "Slip-on" attachments for heavy-duty net. Goal to have orange enamel finish. Goal of welded steel ring with "Slip-On" attachments for 120 thread retarding type net also included.

TRANSPARENT FAN-SHAPED BACKBOARD & COMPANION GOAL—Official 39" x 54". To have metal frame; with Herculite imbedded in Neoprene. To have goal mounting plates front and rear with Neoprene sheeting, front plate fastened to frame. Border and target to be fired vitreous white enamel (on back surface). Goal to have orange enamel finish. Goal of welded steel ring with "Slip-On" attachments for 120 thread retarding type net also included.

WOOD RECTANGULAR BACKBOARD & COMPANION GOAL—Official 4'0" by 6'0", ¾" 5-ply fir, on yellow pine frame. Corners, tongue-and-groove joined. Frame to have 4 vertical braces. Board shall have one coat of flat white finish; backboard face, a second coat of white enamel. Goal to have orange enamel finish. Goal of welded steel ring with "Slip-On" attachments for 120 thread retarding type net also included.

TRANSPARENT RECTANGULAR BACKBOARDS & COMPANION GOAL—Official. To have metal frame; with ½" thick Herculite imbedded in Neoprene. To have goal mounting plates front and rear with Neoprene sheeting. Rear plate to be connected to safety rod. Border and target to be fired vitreous white enamel (on back surface). Goal to have orange enamel finish. Goal of welded steel ring with "Slip-On" attachments for 120 thread retarding type net also included.

(NOTE: *Installation Hardware is not furnished with backstops as erection conditions vary greatly.*)

GENERAL

FINISH—All parts, except backboards, goals, cables, ropes, bolts and nuts, shall be finished in black enamel. Wood stringers to be natural finish.

NOTE: *If other finish desired, specify at job site by painting contractor.*

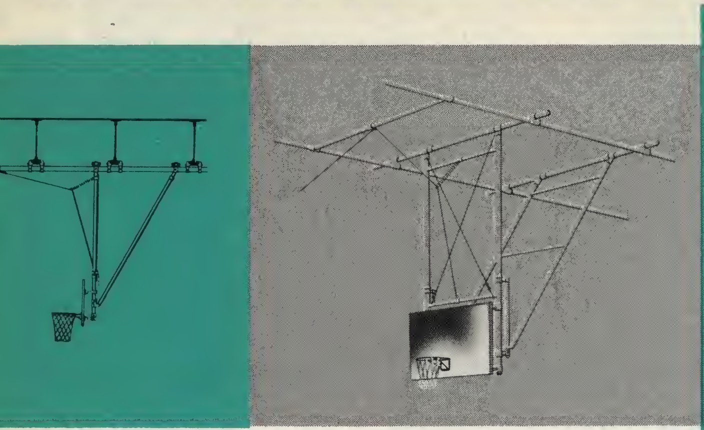
SHEAVES, ETC.—Swing up backstops shall be equipped with suitable sheaves and other fittings to permit easy hoisting.

WINCH AND HOIST CABLE—Winch to be enclosed type, worm gear design. Winch shall be operated by—(specify hand crank, portable operator, or remote control). Hoist cable to be of good quality steel.

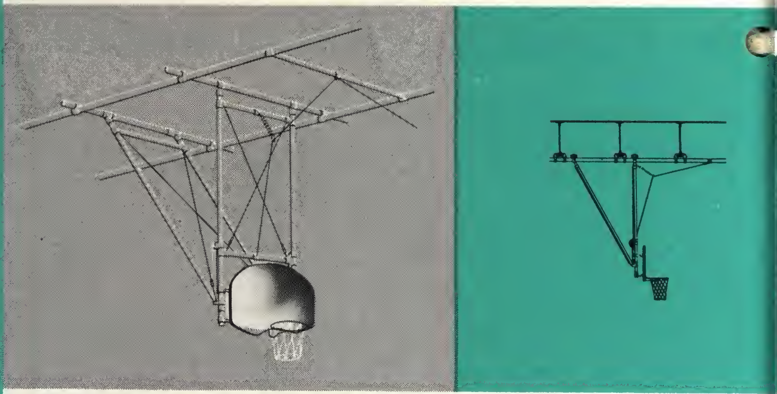
NOTE: *More detailed specifications are available, if desired.*

HERCULITE is the registered Trade
Mark of The Pittsburgh Plate Glass Co.

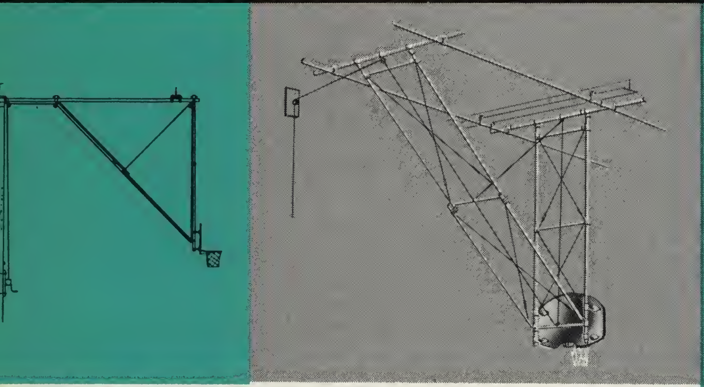
TYPICAL SUSPENDED TYPES OF MEDART BASKETBALL BACKSTOPS



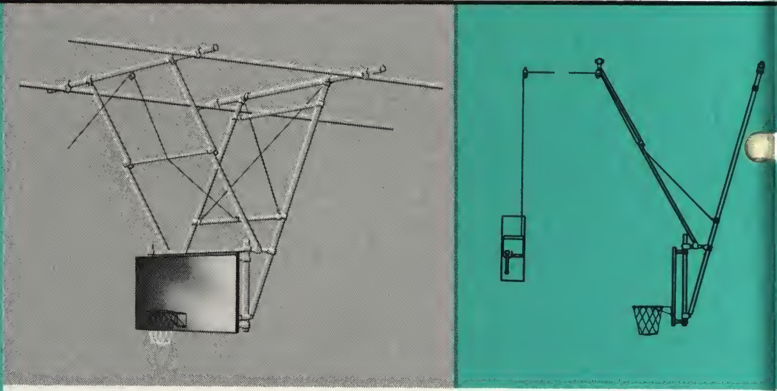
No. 270 Self-Braced Forward Swing-Up. Welded drop and brace frames assures exceptional rigidity. Slide rod connection between drop and brace frames is equipped with adjustment nuts to provide simultaneous seating when backstop is lowered. Fully automatic action with power operation.



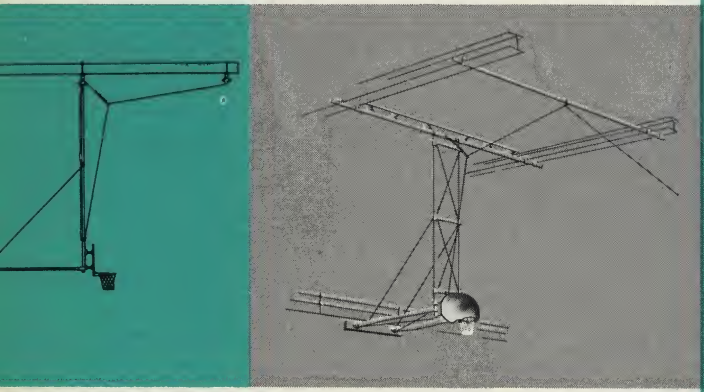
No. 261 Self-Braced Forward Swing-Up. For use in front of stage, balconies, or where wall must be kept clear. This backstop features exclusive locking mechanism which automatically disengages when backstop is hoisted.



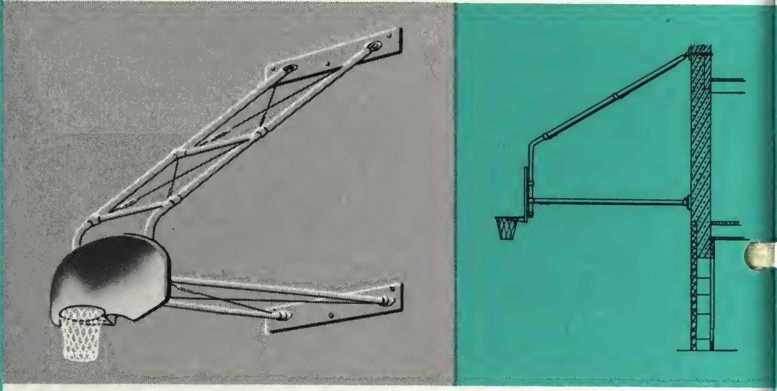
No. 271 Backward Swing Up. Whenever space and other building conditions permit, this type of backstop can be installed. The rear braces are jack-knife construction, folding together as the backstop is raised.



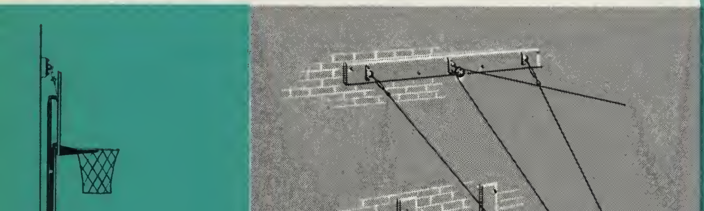
No. 276 Forward Swing-Up. Used where backboard must be placed close to wall or folding partition. Forward type bracing is jack-knife type, folding when backstop is raised.



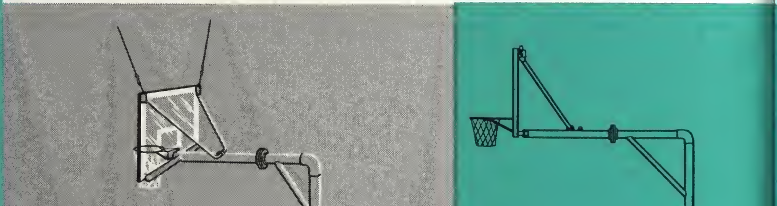
No. 272 Structure-Braced Forward Swing-Up. Can be braced to wall, balcony or stage floor. Hand screw or toggle bolt secured braces . . . easily unfastened for hoisting.



No. 421 Modified Fixed Wall-Braced. Recommended when wall is sturdy and board must be extended more than 8′0″ and conditions do not interfere with stringer location. (Can be hinged to swing up if desired—No. 472.)



No. 404 Wall-Braced Swing-Up. Often used instead of suspended swing-up backstop. Equipped with hinged pipe supports, backstops can be folded up and back against wall. Extensions up to 8′0″.



No. 555 Field House Type. Recommended when trusses are extremely high. Can be unbolted from mounting flange imbedded in concrete slab which is below floor surface.

National Basketball Committee Rules permit "6 inch extension" as official. This is Medart Standard.

FRED MEDART PRODUCTS, INC.
3562 DEKALB STREET, ST. LOUIS 18, MISSOURI • PHONE: PROSPECT 6-1880

Digitized by:

INTERNATIONAL

ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

https://archive.org/details/buildingtechnologyheritagelibrary

From the collection of:

Carol J. Dyson, AIA